



DWR CCTAG Scenarios Subgroup Meeting



June 6, 2014

**California Department of Water Resources
Climate Change Technical Advisory Subgroup Meeting**

June 6, 2014

10:00 am-12:00 pm

DWR Fishbowl Conf Room, 2nd floor, Bonderson

<https://resources.webex.com/resources/j.php?ED=229264172&UID=491358787&RT=MiM0>

Provide your phone number when you join the meeting to receive

a call back. Alternatively, you can call:

Call-in toll-free number (Verizon): 1-877-923-1522 (US)

Host access code: 679 474 0

Attendee access code: 295 056 7

AGENDA:

Recommendations Report, due end of 2014

Writing Assignments Spreadsheet

Draft text or outlines, items #1-4

Background

Model Selection

Stress Tests

Downscaling

Discussion and establish workgroup for item #5, Applications

Initial Discussion item #6, Future Improvements

Plan for 7/18 Subgroup and 7/28 Full CCTAG

CCTAG 2014 Model Recommendations Report

Outline and Assignments

Section	Topics	Work Team	Notes	outline or draft requested	Draft DUE
1) Background, Purpose, and Need					
	a) Past activities and modeling approaches	A Schwarz		6/6/2014	Draft due 7/18
	b) DWR planning applications	A Schwarz	Char Report	6/6/2014	Draft due 7/18
	c) Other planning applications (IRWM, UWMP, AWMP, RFMP)	H Alpert, S Young, A Schwarz		6/6/2014	Draft due 7/18
	d) Exclusion of flooding from this analysis	M Anderson		6/6/2014	Draft due 7/18

CCTAG 2014 Model Recommendations Report Outline and Assignments (Cont.)

Section	Topics	Work Team	Notes	outline or draft requested	Draft DUE
2) Model Selection					
	a) General approach	Dan C, A Schwarz, Jamie A	Include Roadmap and Lit Review, Prev Research. Dan C presented 5/16; EL sending notes to start you.	6/6/2014	Draft due 7/18
	b) Global filter	Dan C, Jamie A	Dan/Mary ranking assessment	6/6/2014	Draft due 7/18
	c) Regional filter	Dan C, Jamie A	Dan/Mary ranking assessment	6/6/2014	Draft due 7/18
	d) Water Management filter/Water Management metrics	A Schwarz, J Wang		6/6/2014	Draft due 7/18
	e) Water management and operations modeling limitations	A Schwarz, J Wang		6/6/2014	Draft due 7/18
	f) NEW Precip Process Vetting thru CCTAG	A Schwarz, D Cayan			
NEW	Model Independence Identification	J Gyakum, M Correa, D Cayan, M Gautam		Background research by 6/6	Outline due 7/18

CCTAG 2014 Model Recommendations Report

Outline and Assignments (Cont.)

Section	Topics	Work Team	Notes	outline or draft requested	Draft DUE
3) Stress-test/ Drought Scenario Development		Co-Leads: D Curtis & M Anderson. Team includes R Langridge, J Gyakum and as named below.	Assignments for topics in this section to be assigned by workgroup.	6/6/2014	Draft due 7/18
	a) Description of different potential drought conditions and the stresses they put on the system	From names above and K Redmond, M Dettinger		6/6/2014	Draft due 7/18
	b) Potential uses of drought scenarios	From names above and R Juricich		6/6/2014	Draft due 7/18
	c) Analysis of climate scenarios to identify drought stresses	From names above and A Schwarz		6/6/2014	Draft due 7/18
	d) Development of drought scenarios not found in the climate scenarios	From names above		6/6/2014	Draft due 7/18
	e) Water management and operations modeling limitations	A Schwarz, J Wang		6/6/2014	Draft due 7/18
	f) NEW Precip Process Vetting thru CCTAG	A Schwarz, D Cayan			

CCTAG 2014 Model Recommendations Report

Outline and Assignments (Cont.)

Section	Topics	Work Team	Notes	outline or draft requested	Draft DUE
4) Downscaling					
	a) Previous approaches to downscaling	A Schwarz, Jamie A	WUCA	6/6/2014	
	b) Recommendations on future downscaling approaches	A Schwarz and D Cayan, Leads		6/6/2014	
	i) Statistical	M Dettinger		6/6/2014	
	ii) Dynamical	L Kavvas		6/6/2014	

CCTAG 2014 Model Recommendations Report

Outline and Assignments (Cont.)

Section	Topics	Work Team	Notes	outline or draft requested	Draft DUE
5) Guidance for Applications (renamed from Projection Sampling)		Team to be determined 6/6		No Draft due; discussion only on 6/6	Outline due 7/18
	a) Characterizing the projections			No Draft due; discussion only on 6/6	Outline due 7/18
	b) Using an ensemble average			No Draft due; discussion only on 6/6	Outline due 7/18
	c) Sampling from the ensemble			No Draft due; discussion only on 6/6	Outline due 7/18

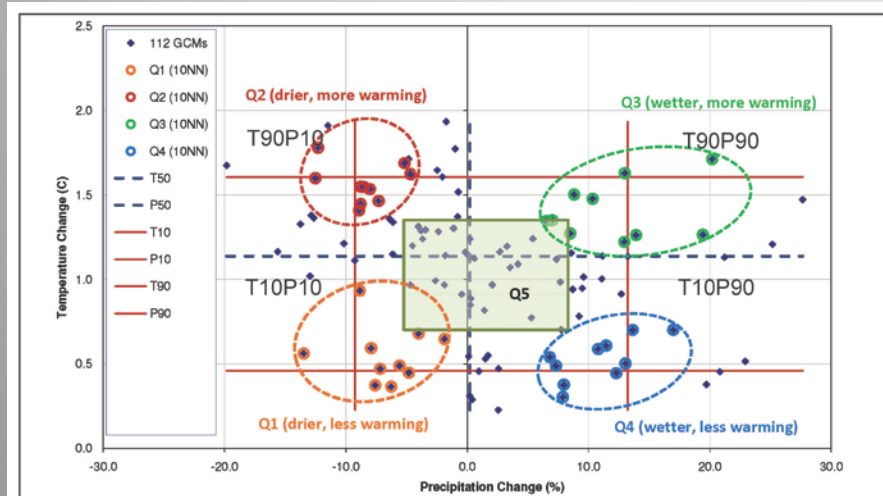
CCTAG 2014 Model Recommendations Report Outline and Assignments (Cont.)

Section	Topics	Work Team	Notes	outline or draft requested	Draft DUE
6) Recommendations for future investigations and improvements				Full CCTAG discussion on 7/28	Full CCTAG discussion on 7/28
NEW	Using decision support tools for climate change water management	K. Georgakakos		6/6	7/18

Recommendations from CCTAG on the applied use of these models

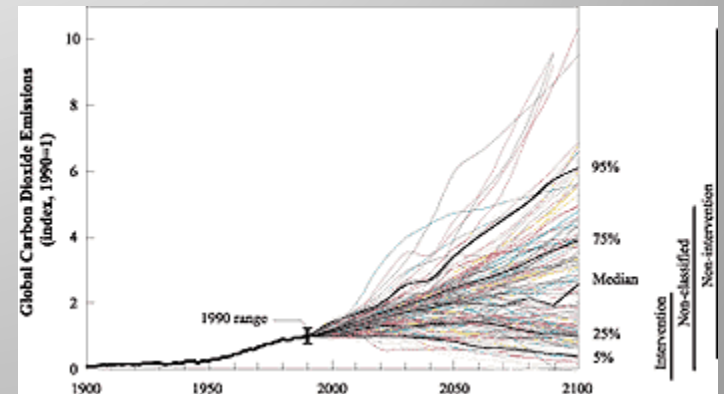
- 11 models x 2-3 emissions RCPs x 1-5 initial conditions runs....
 - Not all (probably most) projects will only be able to analyze a subset of the projections
 - Sampling vs. Ensembles
 - What would the CCTAG like DWR and others to consider when using something less than the full complement of models?
- ❖ Remember the Bay Delta Office has always anchored projections to historical hydrology and sometimes climatology...do we need additional recommendations for this process?

Characterizing or Classifying the Projections



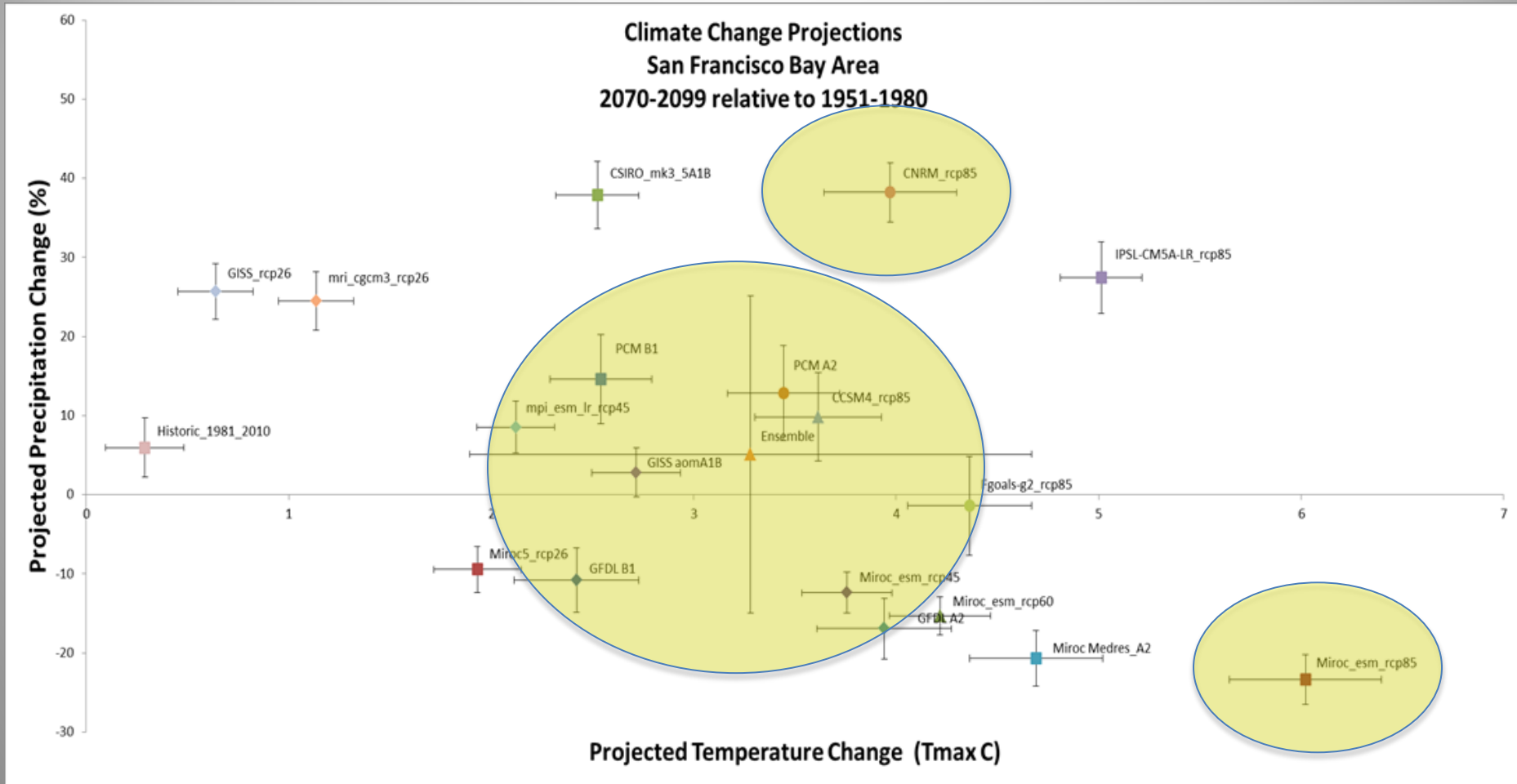
This is a hot and dry projection...

VS.



Each of these projections shows something a little different...

Characterization doesn't necessarily have to be hot/warm, wet/dry but some way of batching, characterizing, or grouping them would be helpful.



Other Characterizations?

- Variance and Variability?
- Seasonal shifts?

THANK YOU!

Next Subgroup **July 18th**

